



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/599,080	11/02/2006	James Harrison	AJD-2.204.0US	3843
3624	7590	02/06/2008		
VOLPE AND KOENIG, P.C. UNITED PLAZA, SUITE 1600 30 SOUTH 17TH STREET PHILADELPHIA, PA 19103			EXAMINER MUROMOTO JR, ROBERT H	
			ART UNIT 3765	PAPER NUMBER
			MAIL DATE 02/06/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/599,080

Applicant(s)

HARRISON, JAMES

Examiner

Robert H. Muromoto, Jr.

Art Unit

3765

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 9/19/2006.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5, 8, 9, 12, 15 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

There is no antecedent basis for the recited "third angle" in claims 5, 8, 9, 12, 15 and 16.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Kuckart US patent 5,601,120.

Independent claim 1 is a very broad embodiment of the instant invention. Independent claim 2 is a very specific embodiment of the claimed invention. Therefore any reference that discloses claim 2 will already have disclosed all of the limitations of

Art Unit: 3765

claim 1. The examiner will be addressing mainly claim 2 and as such will also be addressing the much broader limitations of claim 1.

'120 recites, "The present invention relates to seams for industrial fabrics, such as papermakers fabrics and a seaming method.

When used on papermaking equipment, papermakers fabrics are configured as endless belts to form and/or transport a paper product as it is made. Woven papermakers fabrics are made by either conventional flat or endless weaving. With flat woven fabrics, the warp yarns are oriented in the machine direction of the papermaking equipment on which the fabric is used. With endless woven fabrics, the weft yarns are oriented in the machine direction during usage. Endless weaving techniques may be used to weave a seamless papermakers fabrics. However, there are practical limitations on the overall size of endless woven fabrics as well as inherent installation difficulties. Moreover, not all papermaking equipment is designed to accept the installation of an endless woven seamless fabric. Consequently, **both endless and flat woven papermakers fabrics are often supplied having opposing ends which are joined during installation of the fabric on papermaking equipment.**

**A variety of seaming techniques are well known in the art. One conventional method of seaming is to form alternating machine direction yarns on each end of the fabric into a series of loops. The loops of the respective fabric ends are then intermeshed during fabric installation to define a channel through which a pintle is inserted to lock the ends together.**

It would be desirable to provide a papermakers fabric with reinforced machine direction seaming loops with increased structural stability. It would also be desirable to have a fabric with reinforced seaming loops without significantly increasing the bulk or thickness of the fabric at the seam (col. 1, lines 5-53)."

"In the preferred embodiment, the fabric is flat woven with at least two stacked layers of flat monofilament MD yarns, and at least one layer of cross machine direction yarns (hereinafter CMD yarns). After the fabric is woven and heat set, the fabric is trimmed to a desired length. CMD yarns are then removed from each end to result in crimped MD yarn end portions projecting from each end of the fabric. Proceeding across the fabric, two end portions from every other group of stacked MD yarns are looped back upon themselves and rewoven into the fabric end to form a pair of nested orthogonal end loops, i.e., a double loop. Where there are more than two MD yarns in each group of stacked yarns, the non-loop forming yarns are trimmed back to vacate space used for the backweaving of loop forming MD yarns.

With respect to the alternate groups of stacked MD yarns which are not used to form the end loops, all but a single MD yarn of each stacked MD yarn group are trimmed back. The single untrimmed projecting MD yarn end portions are then backwoven into the fabric to retain the endmost remaining CMD yarns, preferably in space vacated by trimming one of the other stacked MD yarns.

It is the object of the invention to provide a fabric constructed of all

**monofilament yarns with double end loops which increase strength and durability of the fabric (col. 1, line 55- col. 2, line 25)."**

The citations above clearly disclose many limitations of claims 1 and 2 and have been underlined and bold faced for emphasis.

A woven fabric inherently includes being woven in a "repeat pattern" as claimed.

Referring to figures 2 and 5, the fabric clearly has 'exposed floats' on both the paper and machine side of the fabric.

Figures 2 and 5 clearly show 'knuckles' as recited in claim 2.

Figures 7 and 13 and the citations above disclose the 'seaming' and 'reweaving' as recited in claim 2.

The recitations with regard to 'bending' warp yarn ends to form loops at different angles in claims 1, 2, 5-9, and 12-16; and 'creation' of angled loops in claims 3, 4, 10, and 11 are product-by-process limitations. Additionally, the reference structure is identical to the claimed structure. The reference fabrics end loops could be 'bent' to different angles as claimed. Nothing precludes the double endloops of adjacent MD yarns from being 'bent' to form different angles to form double endloops with adjacent MD endloops as claimed.

"[T]he lack of physical description in a product-by-process claim makes determination of the patentability of the claim more difficult, since in spite of the fact that the claim may recite only process limitations, it is the patentability of the product claimed and not of the recited process steps which must be established. We are therefore of the opinion that when the prior art discloses a product which reasonably appears to be

Art Unit: 3765

either identical with or only slightly different than a product claimed in a product-by-process claim, a rejection based alternatively on **either section 102 or section 103** of the statute is eminently fair and acceptable. As a practical matter, the Patent Office is not equipped to manufacture products by the myriad of processes put before it and then obtain prior art products and make physical comparisons therewith." In re Brown, 459 F.2d 531, 535, 173 USPQ 685, 688 (CCPA 1972)."

In view of the similarities between the claimed fabric, and that of the prior art, it is reasonable to believe that the product made by the prior art process would be either identical to or only slightly different from the claimed product. In such a situation, the burden of proof shifts to applicant to prove that the claimed product is materially different.

Additionally with regards to claim 11, the reference states, "Preferably, an inner loop is-formed with respect to each outer loop so that all of the end loops are double loops. However, it will be recognized by those skilled in the art, that providing inner loops for only half of the outer loops or less will still result in a substantially more durable seam."

All claims that recite an unclearly recited "third angle" as stated in 112 rejection above are incorporated into this rejection as there is no clear antecedent for this recitation in the claims.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert H. Muromoto, Jr. whose telephone number is 571-272-4991. The examiner can normally be reached on 8-530, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Welch can be reached on 571-272-4996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Bobby Muromoto  
/Bobby Muromoto/  
Patent examiner  
Art unit 3765  
January 28, 2008